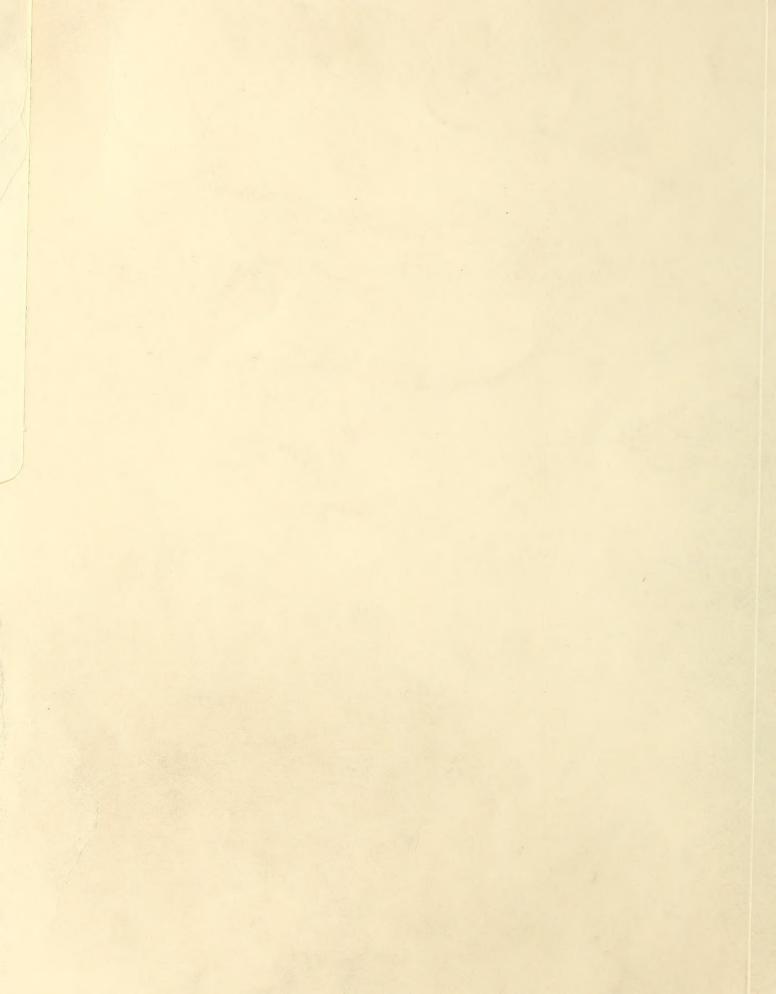
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SNOW SURVEYS AND IRRIGATION WATER FORECASTS

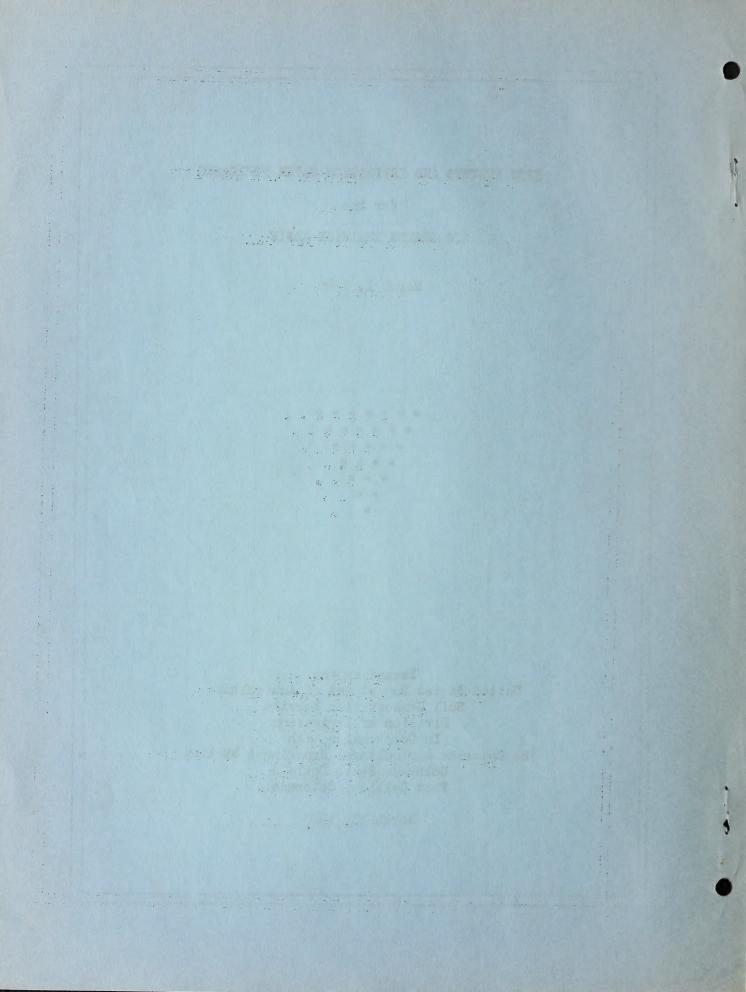
for the

RIO GRANDE DRAINAGE BASIN

March 1, 1940

Issued by the
United States Department of Agriculture
Soil Conservation Service
Division of Irrigation
In Cooperation with
The Colorado Agricultural Experiment Station
Colorado State College
Fort Collins, Colorado

March 10, 1940



for

RIO GRANDE BASIN

March 1, 1940

wise conducted cooperatively with the State Engineers of Colorado and New Mexico. Colorado Agricultural Experithe Division of Irrigation, Soil Conservation Service of the U. S. Department of Agriculture, in cooperation with other Federal Bureaus, State Departments, and local organizations. The snow measurements are made principally by field personnel of the U. S. Forest Service and Colorado State Engineer. This work is otherment Station, and various municipalities, irrigation associations and others. Precipitation records are The following data pertaining to snow surveys and irrigation water-supply forecasts are provided by supplied by the U. S. Weather Bureau.

PRECIPITATION DATA

| Departure Precipitation I from Normal February | Inches Inches Inches Inches 3.03 -0.16 0.91 -0.40 4.70 -0.36 2.31 +1.20 5.18 +0.01 1.46 +0.30 3.62 +0.12 0.91 +0.28 |
|--|---|
| Precipitation October 1 to February 29 | Inches 3.03 4.70 5.18 3.62 |
| STATE | New Mexico Colorado New Mexico New Mexico |
| WATERSHED | Ganadian Rio Grande Rio Grande Pecos |

SUMMARY OF MARCH 1 SNOW SURVEYS AND COMPARISON OF DATA WITH THAT OF PREVIOUS YEARS BY WATERSHEDS

| | | | | | | | Number | | | | 1940 Wate | 1940 Water Content |
|----------------------------------|------------|------------------------------------|------|-------|---------------|------|---------|--------------|--------------|-----------------|---------------|--------------------|
| WATERSHEDS | Sno | Snow Depth | - | Water | Water Content | nt | Courses | Snow | Snow Density | | in percent of | t of |
| | Five | Five Five Five Year 1939 1940 Year | 1940 | Five | 1939 | 1940 | Report- | Five Year | 1939 | 1940 | Five Year | 1939 |
| | AVE. | | | AVE. | | | 1940 | MV8. | | | WVS. | |
| | In. | In. In. | In. | In. | In. | Ine | | Percent | | Percent Percent | | |
| Rio Grande | 31.2 | 33.5 | 27.9 | 8.7 | 8.7 | 7.8 | 8 | 28 | 56 | 28 | 90 | 8 |
| Canadian River 16.0 18.2 19.0 4. | 16.0 | 18.2 | 19.0 | 9•4 | †•† | 5.8 | 2 | 29 | 5/1 | 31 | 126 | 132 |
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watershed of the Canadian River the water content of the snow, based on measurements on 2 courses, was 5.8 Summaries of the data are given in the accompanying Precipitation in New Mexico and in the San Luis Valley in Colorado during February was above normal, shown by measurements on 20 courses, was 7.8 inches. Last year at this time it was 8.7 inches. For the March 1 the water content of the snow on the watershed of the Rio Grande in Colorado and New Mexico, as which resulted in a considerable increase in the snow cover over the mountain areas during the month. inches, on March 1, and last year it was 4.4 inches.

deficient. Stream flow and reservoir storage is below normal. Although conditions have improved during The moisture content of the surface soil increased during February, but subsoil moisture is still the month, more snow is needed in the mountain areas to insure normal runoff this summer.

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RIO GRANDE WATERSHED

Summary of Federal and State Cooperative Snow Surveys Issued March 10, 1940, at Fort Collins, Colo.

| | | | LSS | Issued March 10, I | March 10, 1940, at Fort Collins, Colo. | Collins, | | 1 | | | | | - |
|----------------|------------------|-----------------|--------|--------------------------------|--|------------------|---|-----------|----------------------------------|-----------|---------|---------------------------------------|------|
| Main | Main Drainage | Local | | | | Elev. National | | Mar.1 | Mar. 1 Snow Course Measurements | Course | Meas | remer | nts |
| Te at | and | Drainage | State | Locality | Descrip- | Forest | | Av. Si | Av. Snow Depth Av. Water Content | oth Av | . Water | r Con | tent |
| No Snow Course | Course | | | | tion | | | Avg. | 1939 1940 | 940 Avg. | 8. 10 | 1939 1 | 1940 |
| | | | | | | | | Ine | In. In | In. In. | | | ſn. |
| RIO | RIO GRANDE | | | | | | | | | 1 | | | |
| 26 Wolf | Wolf Creek Pass | South Fork | Colo. | Wolf Cr. Pass | 4-37M-2E | 10000 Rio | Grande | 74.0 (| 67.2 5 | 53.0 22.4 | | 7.6 | 15.6 |
| 27 Upper | Upper Rio Grande | Rio Grande | = | frande Res. | 13-10N-4W | 9350 " | £ | 22.8 | | - | | カ。カ | 3.0 |
| 147 Silve | Silver Lakes | | = | Imi.S.Silver Lois-360-5E | 15-36N-5E | 9600 | = | 22.4 8 | | | | ≒ * | 3.3 |
| 49 River | River Springs | Conejos R. | = | .W.Mogote | 25-33N-6E | 9300 " | = | 28.3 | | | 7.1 (| 9.9 | たっと |
| 74 LaVet | LaVeta Pass #2 | San. Cristo Cr. | = | ta Pass | 22-285-70W | | San. CristoGr. | 34.41 | 43.8 3 | | | 3.3 | 707 |
| 75 Ute F | Ute Ridge | Rio Grande | = | Rio Grande Res. | 31-411-4W | Rio | Grande | 1 | | | | 5.1 | 1 |
| 76 Summi | Summitville | Wightman Cr. | = | Summitville | 30-37四-4田 | 11500 " | = | 53.0 54.0 | | 52.0 14.0 | | 14.1 | 13.8 |
| 77 Cumbi | Cumbres Pass #2 | Los Pinos R. | = | Cumbres Pass | 17-32M-5E | 100001 | = | 69.7480.7 | | | - | | 18.8 |
| 80 Santa | Santa Maria | N.Clear Cr. | = | a Maria Res | 8-41M-2W | 9700 | = | 13.6 | | 10 | | - | 2.2 |
| 82 Culebra | ira | Culebra R. | = | E.SanLuis | 37 - 2M105 - 2W | 10000 San. | San. CristoGr. | ! | 1 | 16.3 | | - | 11.2 |
| 84 Fort | Fort Garland | Big Ute Cr. | = | N.Ft.Garlan | 13-2911-72W | 8200 # | ======================================= | 1 | - 12 | 12.1 | - | 1 | 3.0 |
| 1 Red River | liver | Red River | N.Mex. | 6mi .SE.RedRiver29-28H-15E | 29-28年-15年 | 9500 Carson | | 27.9 | 24.9 26 | 26.3 7 | 7.9 | 7.1 | 8.5 |
| 2 Taos | Taos Canyon | Rio de Taos | = | 14mi .E. Taos | 10-25N-15E | 0006 | | 18.8 | | | | 8.0 | 6.9 |
| 4 Asper | Aspen Grove | Rio En Medio | = | 10mi .证。SantaRe | 12-18N-10E | 9100 Santa | ±e Fig | | 30.7 2 | | | 7.3 | 5.5 |
| 5 Lee Ranch | Ranch | Jemez Cr. | 52 | 5mi.IW.Bland | 3-1811-4国 | 9050 | = | | | | 0.9 | 6.3 | 7.7 |
| 6 Canjilon | llon | Canjilon Cr. | = | Smi.NE.Canjilon4-26N-6E | 4-26N-6E | 9500 Carson | | 48.8 | 50.7 50 | 50.0 17.0 | | | 18.2 |
| 7 Rio M | Rio Nutrias | Rio Mutrias | = | 10mi . SE . Park View 6-27N-5E | 5-27N-5E | 1 0062 | | | 20.6 1 | | | +.3 | 4.5 |
| 8 Panchuela | nuela | Panchuela Cr. | = | lmi.N.Cowles | 34-19N-12E | 8500 Sant | Santa Fe | 12.2 | | | 3.4 l | h.8 | 4.2 |
| - | Hematite Park* | Red River | = | | 8-28N-15E | 9500 Carson | | 20.2 | 18.9 26 | | | +o.1 | 7.5 |
| 12 Tres | Tres Ritos | Agua Piedra | = | 7mi.W.Holman | 23-22N-13E | 9000 | | 22.3 | 31.1 28 | 28.0 5 | | 8.3 | 2.9 |
| 15 Pay Role | lole | Rock Creek | t= | 4mi .SE .Hopewell | 16-28II-7E | 100001 | | 1 | 1 | 1 | | - | 1 |
| 16 Jicarilla | rilla | Rock Lake Cr. | = | 15mi.S.Dulce | 9-29N-1W | 8500 Jica | Jicarilla Res. | 1 | 1 | | | 1 | 1 |
| 17 Chama | Chama Divide | Willow Creek | = | 6mi.W.Chama | 36.9N106.7W | 6 00 | est | 1 | 1 1 | 1 | 1 | 1 | 5.4 |
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| 9 Hemat | Hematite Park | Moreno Greek | N-Mex | Zmi SE Red B. | K-DKN-15E | GALON Gargon | | 000 | 18.9 | 26.2 | - | 17 | 7.5 |
| | Ocate Mesa | Ocate Creek | = | Smi.E.Black L. | 25-24N-16E | 9200 Off Forest | est | 11.8 | 17.4 | 1 | 1 | 9 # | 4.1 |
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*On adjacent Drainage *Readings on original course.

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